UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/881,019	06/15/2001	Mrudula Kanuri	F0680	7824

45114 7590 04/18/2005

HARRITY & SNYDER, LLP
11240 WAPLES MILL ROAD
SUITE 300
FAIRFAX, VA 22030

EXAMINER	
MOORE, IAN N	

ART UNIT	PAPER NUMBER
2661	

DATE MAILED: 04/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/881,019	KANURI ET AL.	
	Examiner	Art Unit	
	Ian N Moore	2661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 June 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *15 June 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102 (b)

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 8 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Dobbins (U.S. 5,825,772).

Regarding Claim 8, Dobbins discloses a method of processing packets in a network device (see FIG. 2, VLAN switch; see FIG. 15, VLAN switch 141 or 142; see FIG. 7 a, method), comprising:

receiving a packet at one of a plurality of receive ports in the network device (see FIG. 3a, receiving switch ports at the VLAN switch), the packet including address information that indicates at least a destination subnet for the packet (see FIG. 3a and 3b; VLAN addresses/ID; see col. 10, lines 4-61); see FIG. 7a, steps 100-101; see col. 17, lines 2-6;

identifying, via a configuration table (see FIG. 3 a-b, local directory cache), one or more output ports (see FIG. 3 a-b, switch ports) in the network device for the packet based on the address information (see FIG. 3 a-b, addresses; see col. 10, lines 4 to col. 11, lines 6; see col. 12, lines 16-34); see FIG. 7 a, steps 102,103; see col. 17, lines 3-25;

forwarding the packet to the destination subnet via the identified one or more output ports (see FIG. 7a, step 103,105,107; see col. 17, lines 10-34); and

updating the configuration table based on information received from a remote processor (see FIG. 15, VLAN administration management application 143, or see FIG. 16, M10, remote network management station; see col. 19, lines 60 to col. 20, lines 20), the remote processor transmitting the information to the configuration table using an IP address uniquely assigned to the network device (see col. 19, lines 60 to col. 20, lines 20).

Regarding Claim 13, Dobbins discloses a network device (see FIG. 2, VLAN switch; see FIG. 15, VLAN switch 141 or 142) for routing packets received in a packet-switched network (see FIG. 2 and see FIG. 15, "packets" switching network; see col. 12, lines 40-50) comprising:

means for receiving the packets from the network (see FIG. 3a, receiving at switch ports at the VLAN switch), each of the packets having information that includes at least destination information that indicates an intended destination subnet for the packet (see FIG. 3a and 3b; VLAN addresses/ID; see col. 10, lines 4-61); see FIG. 7a, steps 100-101; see col. 17, lines 2-6;

a configuration table (see FIG. 3 a-b, local directory cache) storing associations between Internet Protocol (IP) addresses of subnets (see FIG. 3 a-b, addresses; see col. 10, lines 4 to col. 11, lines 6; see col. 12, lines 16-34) and output ports of the multiport switch (see FIG. 3 a-b, switch ports) the configuration table being updated based on information received from a remote processor (see FIG. 15,

VLAN administration management application 143, or see FIG. 16, M10, remote network management station; see col. 19, lines 60 to col. 20, lines 20),

means for determining appropriate output ports in the network device for the received packets based on the destination information and the configuration table (see FIG. 3 a-b, addresses; see col. 10, lines 4 to col. 11, lines 6; see col. 12, lines 16-34); see FIG. 7 a, steps 102,103; see col. 17, lines 3-25); and

transmit means for transmitting the packets from the output ports determined by the means for determining (see FIG. 7a, step 103,105,107; see col. 17, lines 10-34).

Claim Rejections - 35 USC § 102 (e)

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-5,7-11, and 13-17 are rejected under 35 U.S.C. 102(e) as being anticipated by Siddiqui (U.S. 6,826,176).

Regarding Claim 1, Siddiqui discloses a system for transmitting packets of information (see FIG. 2, system for routing data packets; see col. 3, lines 31-35), comprising:

a multiport switch (see FIG. 2, Media Gateway/bridge 120-B) connected to a plurality of subnets (see FIG. 2, IP network contains plurality of subnets) through ports of the multiport switch (see FIG. 2, ports of Media Gateway/bridge 120-B), each of the plurality of subnets being associated with a subnet Internet Protocol (IP) address (see FIG. 2, IP network/address; see col. 4, lines 45-67), the multiport switch further including a configuration table (see FIG. 2, port mapping table 230; see FIG. 3) storing associations between the subnet IP addresses (see FIG. 3, address/name in IP network) and the ports (see FIG. 3, port addresses) of the multiport switch (see col. 6, lines 39-49);

a host processor (see FIG. Media gateway controller, 110-B) connected locally to the multiport switch (see col. 4, lines 15-34; see col. 5, lines 20-29); and

a remote processor (see FIG. 2, Media Gateway Controller 110-A) communicating with the multiport switch through the host processor using an IP address assigned to the multiport switch (see col. 4, lines 10-17; see col. 5, lines 20-26), the remote processor instructing the host processor to modify the configuration table in the multiport switch (see col. 4, lines 15-35; 55-62; see col. 5, lines 1 to col. 6, lines 49).

Regarding Claim 2, Siddiqui discloses wherein the host processor communicates with the remote processor through a TCP/IP stack (see FIG. 2, IP network uses TCP/IP); see col. 4, lines 45-67).

Regarding Claim 3, Siddiqui discloses a router (see FIG. 2, Media gateway 120-A) coupled to at least one port of the multiport switch (see FIG. 2, Media gateway 120-B; see col. 4, lines 45-63).

Regarding Claim 4, Siddiqui discloses wherein the router is coupled to a second plurality of subnets (see FIG. 2, second IP sub-networks connecting with Media gateway 120-A), the second plurality of subnets connecting to the multiport switch (see FIG. 2, MGW 120-B) through the router (see col. 4, lines 45-63).

Regarding Claim 5, Siddiqui discloses wherein the remote processor is located in one of the second plurality of subnets (see FIG. 2, Media gateway controller 110-A is in one of the second IP sub-network connecting with media gateway 120-A; see col. 4, lines 45-63.

Regarding Claim 7, Siddiqui discloses wherein the host processor is configured to transmit status information relating to the multiport switch to the remote processor (see col. 4, lines 20-35; see col. 5, lines 15-45).

Regarding Claim 8, Siddiqui discloses a method of processing packets in a network device (see FIG. 2, Media Gateway/bridge 120-B), comprising:

receiving a packet at one of a plurality of receive ports in the network device (see FIG. 2, ports of Media Gateway/bridge 120-B), the packet including address information that indicates at least a destination subnet for the packet (see FIG. 2, IP network packet and addresses; see col. 5, lines 1 to col. 6, lines 4),

identifying, via a configuration table (see FIG. 2, port mapping table 230; see FIG. 3), one or more output ports (see FIG. 3, port addresses) in the network device

for the packet based on the address information (see FIG. 3, address in IP network; see col. 6, lines 39-49);

forwarding the packet to the destination subnet via the identified one or more output ports (see col. 6, lines 39-49); and

updating the configuration table based on information received from a remote processor (see FIG. 2, Media Gateway Controller 110-A; see col. 4, lines 15-35; 55-62; see col. 5, lines 1 to col. 6, lines 49), the remote processor transmitting the information to the configuration table using an IP address uniquely assigned to the network device (see col. 4, lines 10-17; see col. 5, lines 20-26).

Regarding Claim 9, Siddiqui discloses wherein the remote processor communicates with the network device through a host processor (see FIG. 2, Media gateway Controller 110-B) connected to the network device (see col. 4, lines 10-62).

Regarding Claim 10, Siddiqui discloses wherein the host processor executes a TCP/IP stack (see FIG. 2, IP network uses TCP/IP); see col. 4, lines 45-67).

Regarding Claim 11, Siddiqui discloses wherein the host processor transmits status information relating to the network device to the remote processor (see col. 4, lines 20-35; see col. 5, lines 15-45).

Regarding Claim 13, Siddiqui discloses a network device (see FIG. 2, Media Gateway/bridge 120-B) for routing packets received in a packet-switched network (see FIG. 2, IP network) comprising:

means for receiving the packets from the network (see FIG. 2, ports of Media Gateway/bridge 120-B), each of the packets having information that includes at least

destination information that indicates an intended destination subnet for the packet (see FIG. 2, IP network packet and addresses; see col. 5, lines 1 to col. 6, lines 4),

a configuration table (see FIG. 2, port mapping table 230; see FIG. 3) storing associations between Internet Protocol (IP) addresses of subnets (see FIG. 3, address/name in IP network) and output ports of the multiport switch (see FIG. 3, port addresses), the configuration table being updated based on information received from a remote processor (see FIG. 2, Media Gateway Controller 110-A; see col. 4, lines 15-35; 55-62; see col. 5, lines 1 to col. 6, lines 49),

means for determining appropriate output ports in the network device for the received packets based on the destination information and the configuration table (see col. 4, lines 10-17; see col. 5, lines 20-26); and

transmit means for transmitting the packets from the output ports determined by the means for determining (see col. 6, lines 39-49).

Regarding Claim 14, Siddiqui discloses wherein a host processor (see FIG. 2, Media gateway Controller 110-B) connected locally to the network device, the host processor communicating with the remote processor (see col. 4, lines 10-62).

Regarding Claim 15, Siddiqui discloses wherein the host processor communicates with remote processor through a TCP/IP stack (see FIG. 2, IP network uses TCP/IP); see col. 4, lines 45-67).

Regarding Claim 16, the claim, which has substantially disclosed all the limitations of the respective claim 11. Therefore, it is subjected to the same rejection.

Regarding Claim 17, Siddiqui discloses wherein the network device is assigned a unique IP address (see col. 4, lines 10-17; see col. 5, lines 20-26).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 6, 12 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Siddiqui in view of Tsuruoka (U.S. 6,101,189).

Regarding Claim 6, Siddiqui discloses a multiport switch (see FIG. 2, gateway/bridge 120 B). Siddiqui does not explicitly disclose a layer 3 switch. However, Tsuruoka teaches a layer 3 gateway (see FIG. 2 and 4A, layer 3 routing/switching gateway apparatus; see col. 5, lines 5-52). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a layer 3 gateway switch, as taught by Tsuruoka in the system of Siddiqui, so that the connection procedure and cost remain substantially the same as the corresponding procedure and cost, and ensuring the connectivity similar to network connection; see Tsuruoka col. 2, line 20 to col. 3, lines 45.

Regarding Claim 12, the claim, which has substantially disclosed all the limitations of the respective claim 6. Therefore, it is subjected to the same rejection.

Regarding Claim 18, the claim, which has substantially disclosed all the limitations of the respective claim 6. Therefore, it is subjected to the same rejection.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ian N Moore whose telephone number is 571-272-3085. The examiner can normally be reached on M-F: 9:00 AM - 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau T Nguyen can be reached on 571-272-3126. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

INM
3/30/05

BOB PHUNKULH
PRIMARY EXAMINER 4/14/05